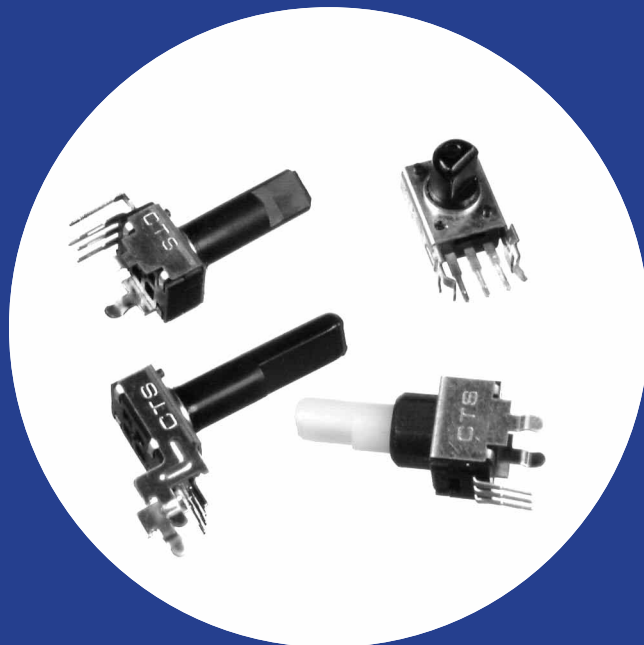


Commercial Composition 9mm Diameter Variable Resistors

- Miniature 9mm size
- Low cost
- Bushing mount or PC mount
- Dual control
- Detent available



Electrical and Mechanical Specifications

Resistance Range

Standard: 500 ohms through 1 megohms.
Special: For non-standard resistance values,
please contact CTS.

Resistance Tolerance

Standard: $\pm 20\%$
Special: Tighter tolerances available
in most resistance values.

Resistance Taper

Standard: Linear
Special: Available

Power Rating

Single section - 0.05 watts @ 50°C derated to no load
@ 85°C for linear curve.
Dual section - 0.03 watts @ 50°C derated to no load
@ 85°C for linear curve.

Dielectric Strength

Withstands 250 VAC for 1 minute

Insulation Resistance

100 megohms minimum at 250 VDC

Maximum Operating Voltage

50 VAC, 20 VDC

Angle of Rotation

Total Rotation: $280^\circ \pm 5^\circ$

Rotational Torque

10-100 g-cm

Stop Strength

3kg-cm minimum

Detent

50% detent available in single section units

Pull-Push Strength

5kgf maximum

Rotational Life

Single section - 5K cycles
Dual section - 2K cycles

Slide Noise

Less than 100mV (measured by JIS C6443)

Gang Error

Within 3dB at -40 to 0 dB

Insertion Loss

0.1 dB maximum

[illegible]

250Y

Technical drawing of the 250Y connector showing three views: side, front, and recommended mounting hole. Dimensions are in mm and inches.

Side View Dimensions:

- Top flange width: 10.0 ± 0.394 mm
- Top flange thickness: 6.5 ± 0.256 mm
- Top flange hole diameter: 1.0 ± 0.039 mm
- Bottom flange width: 2.5 ± 0.098 mm
- Bottom flange thickness: 5.0 ± 0.197 mm
- Bottom flange hole diameter: 2.0 ± 0.079 mm
- Bottom flange hole offset: 3.0 ± 0.118 mm
- Bottom flange hole diameter: 0.5 ± 0.020 mm
- Overall length: $L \pm 0.5$ mm

Front View Dimensions:

- Top flange width: 9.8 ± 0.386 mm
- Top flange thickness: 5.5 ± 0.217 mm
- Top flange hole diameter: 6.3 ± 0.248 mm
- Bottom flange width: 3.95 ± 0.155 mm
- Bottom flange thickness: 0.8 ± 0.031 mm
- Bottom flange hole diameter: 5.0 ± 0.197 mm
- Bottom flange hole offset: 7.4 ± 0.291 mm
- Bottom flange hole diameter: 9.2 ± 0.362 mm

Recommended Mounting Hole Dimensions:

- Top flange width: 2.50 ± 0.05 mm
- Top flange thickness: 0.98 ± 0.002 mm
- Top flange hole diameter: 2.50 ± 0.05 mm
- Top flange hole offset: 8.2 ± 0.05 mm
- Top flange hole diameter: 0.98 ± 0.002 mm
- Top flange hole offset: 1.8 ± 0.071 mm
- Top flange hole diameter: 0.071 mm

Dimensional Tolerances:

- Top flange width: 10.0 ± 0.394 mm
- Top flange thickness: 6.5 ± 0.256 mm
- Top flange hole diameter: 1.0 ± 0.039 mm
- Bottom flange width: 2.5 ± 0.098 mm
- Bottom flange thickness: 5.0 ± 0.197 mm
- Bottom flange hole diameter: 2.0 ± 0.079 mm
- Bottom flange hole offset: 3.0 ± 0.118 mm
- Bottom flange hole diameter: 0.5 ± 0.020 mm
- Overall length: $L \pm 0.5$ mm

RECOMMENDED MOUNTING HOLE

250U

Technical drawing of the 250U valve showing three views: side, front, and recommended mounting hole details.

Side View Dimensions:

- Overall length: $L \pm \frac{0.5}{.020}$
- Distance from end to first step: $\frac{6.80}{.268}$
- Distance from first step to second step: $\frac{1.0}{.039}$
- Distance from end to third step: $\frac{2.0}{.079}$
- Distance from third step to fourth step: $\frac{3.8}{.150}$
- Distance from end to fifth step: $\frac{5.7}{.224}$
- Distance from end to sixth step: $\frac{7.0}{.276}$
- Distance from end to seventh step: $\frac{3.2}{.126}$

Front View Dimensions:

- Overall width: $\frac{9.8}{.386}$
- Distance from center to top hole: $\frac{10.1}{.398}$
- Distance from center to bottom hole: $\frac{5.5}{.217}$
- Distance from center to left hole: $\frac{5.0}{.197}$
- Distance from center to right hole: $\frac{11.4}{.449}$

Recommended Mounting Hole Dimensions:

- Distance from center to top hole: $\frac{10.60 \pm 0.05}{.417 \pm .002}$
- Distance from center to bottom hole: $\frac{1.8}{.071}$
- Distance from center to left hole: $\frac{7.00 \pm 0.05}{.276 \pm .002}$
- Distance from center to right hole: $\frac{2.50 \pm 0.05}{.098 \pm .002}$
- Distance from center to left hole (3): $\frac{2.10 \pm 0.10}{.083 \pm .004}$
- Distance from center to right hole (3): $\frac{2.50 \pm 0.05}{.098 \pm .002}$
- Distance from center to left hole (3): $\frac{2.10 \pm 0.10}{.083 \pm .004}$
- Distance from center to right hole (3): $\frac{2.50 \pm 0.05}{.098 \pm .002}$

DIMENSION: $\frac{\text{MM}}{\text{INCH}}$

UM250 With Bushing



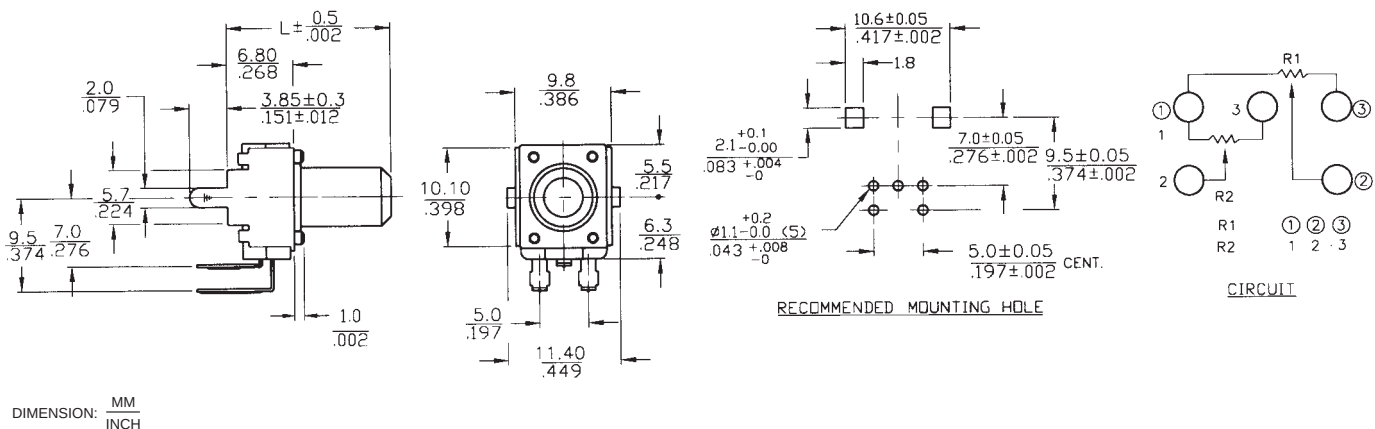
XMD250RE



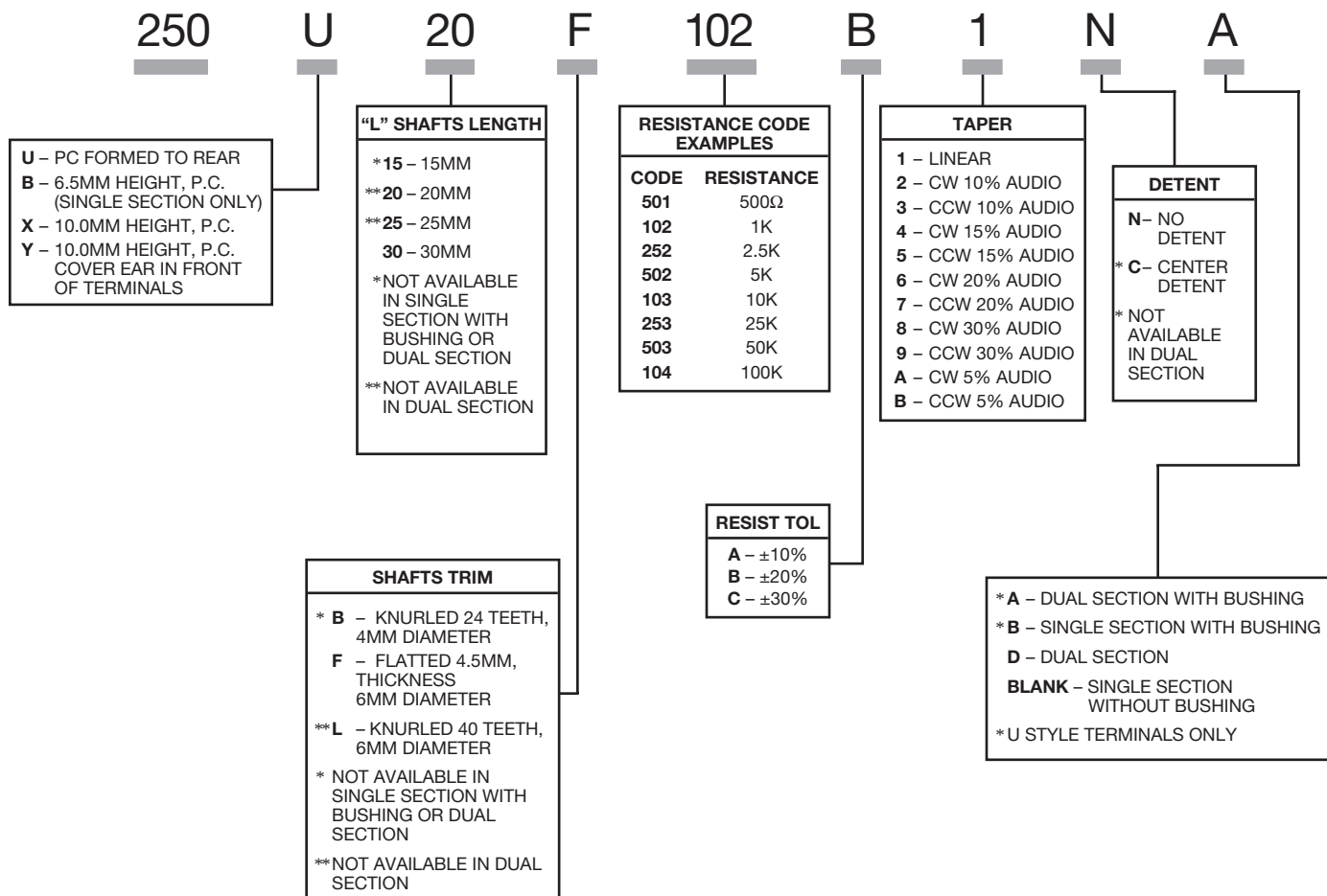
YMD250RE



UMD250RE



Ordering Information



Order From:

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